

## Client Case Study

# Sisters of Mercy Health System Reduces Application Deployment Costs and Cuts Testing Time 90%

*“The combination of HP Quality Center and Surgient’s QA/Test Solution increased testing bandwidth 10X while accelerating application testing from 5 days to 4 hours.”*

*–Chris Marr, QA Lead, Sisters of Mercy Health System*

### Overview

Country or Region: United States  
Industry: Healthcare

### Customer Profile

Sisters of Mercy Health System (Mercy) consists of hospitals, physician practices, outpatient clinics, residential care facilities and other health-related services.

### Challenge

New ERP implementation forced rebuild of 15,000 workstations and 2,000 client applications. Test load jeopardized ERP rollout schedule.

### Solution

HP Quality Center integrated with Surgient’s QA/Test Solution enables client applications to be automatically tested against ERP system.

### Benefits

- Evaluated and implemented solution in less than 90 days
- Accelerated single application testing from 5 days to 4 hours
- Increased bandwidth from 8 to 80 applications tested per week
- Reduced total test coverage from 6 years to 6 months
- Increased the reliability and consistency of software testing
- Boosted team productivity by eliminating time maintaining test lab infrastructure
- Enterprise rollout of ERP system back on schedule

### Quality Healthcare

Established in 1986, the Sisters of Mercy Health System (Mercy) is the 9<sup>th</sup>-largest Catholic healthcare system in the United States. Mercy consists of 18 acute care hospitals, a heart hospital, outpatient care facilities, physician practices, skilled nursing and long-term residential care facilities, clinics, a managed care organization and other health-related services.

Today, Mercy operates in a seven-state area encompassing Arkansas, Kansas, Louisiana, Mississippi, Missouri, Oklahoma and Texas. Health System services are provided by 29,000 co-workers and 4,000 physicians / staff members.

### Desktop Compatibility Testing Threatens Delay of Multi-Million Dollar ERP System

In 2006, Mercy began implementing a new Enterprise Resource Planning (ERP) system to streamline finance, HR and supply chain operations, and to ensure compliance with stringent healthcare industry regulations.

At the same time, Mercy was executing a multi-year initiative to consolidate the IT environment, including reducing the 32,000 workstations and 25,000 client applications deployed across the enterprise.

While Mercy was able to reduce unique workstations and client applications to 15,000 and 2,000 respectively, the new ERP system implementation forced a rebuild of these components and created a massive compatibility testing effort to verify operation against 40 core back-end applications prior to rollout.

To achieve full test coverage would have required 6 years of total testing time based on the existing test lab and manual testing process – a delay that would leave Mercy unable to meet critical ERP rollout deadlines.

“With a 3-person QA team, no test automation, and a test lab consisting of 8 physical machines, we could only test 8 applications per week,” said Chris Marr, QA Team Lead for Mercy. “We had to make some changes and quickly – not only to get the ERP rollout back on track, but to establish a long-term solution for reliably performing a high volume of client application testing.”

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## Mercy Finds the Cure: HP and Surgient

Previously, it took 5 days for Mercy to test a single application. Examining their existing process, Mercy realized they were constrained not only by the time it took a tester to perform manual testing, but also the time spent on manual setup and teardown of the test environment.

“It was clear that simply automating the test was not going to get us where we needed to be,” said Marr. “We needed a solution that would also automate the test lab including being able to save test environments for auditing purposes.”

Mercy considered several approaches and determined that the ideal solution was HP Quality Center integrated with the Surgient Virtual Automation Platform with the QA/Test Solution. The evaluation and implementation of the combined solution was completed in less than 90 days.

“We chose a best-of-breed approach – bringing together the leaders in test automation and test lab management,” said Marr. “The integration between Quality Center and Surgient was a critical factor in our decision because the solution had to deliver immediate value to meet our aggressive deadlines.”

*“With HP Quality Center for test management and Surgient’s QA/Test Solution for test lab management, we have a complete end-to-end test automation process.”*

Chris Marr, Lead Systems Engineer  
Sisters of Mercy Health System

## How it Works: End-to-End Test Automation

Mercy replaced their manual, time-consuming process with an automated process that orchestrates HP Quality Center, HP QuickTest Professional, the Surgient QA/Test Solution and Microsoft Systems Management Server (SMS):

- Tester requests client app and workstation combination to be tested
- Surgient’s QA/Test Solution dynamically allocates test lab resources and automatically deploys the requested workstation configuration onto virtual infrastructure on-demand
- SMS automatically installs the requested client application package on the deployed workstation to establish the application under test
- Quality Center launches test sets consisting of automated functional tests performed by QuickTest Professional
- Following the test runs, results are posted to Quality Center
- Surgient snapshots (saves) the test environment in its completed state
- Surgient automatically tears down the environment – immediately freeing up lab resources for other requests

Saved test environments may be quickly and easily restored to verify results, perform additional testing, and facilitate problem diagnosis and resolution efforts with the application development group.

## The Results: Long-Term Prescription for Success

Test automation reduced single application testing time from 5 to 3 days. Test lab automation further reduced application testing time from 3 days to 4 hours. Total testing bandwidth increased 10X enabling Mercy to test 80 applications per week instead of 8 – all without any increase in test resources.

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*“HP and Surgient are helping us deliver the benefits of the ERP system across the entire organization – passing that level of care directly on to our customers.”*

Chris Marr, Lead Systems Engineer  
Sisters of Mercy Health System

Mercy estimates they can achieve total test coverage in 6 months (instead of 6 years) – time savings that are critical to meeting their ERP rollout schedule.

Finally, Mercy has experienced a boost in team productivity and morale because testers are spending time on more important tasks (e.g. planning and strategy, test case development, documentation, running and analyzing tests) instead of wasting time on building and maintaining test environments.

“To provide the best possible support to Mercy, we need to have information and technology systems that are stable, standardized and easy to access through a system like our ERP implementation,” said Marr. “With HP and Surgient, we’ll be able to test and rollout our ERP application quickly, not only improving the quality of our deployment, but drastically cutting the cost of implementation.”

## About Surgient’s QA/Test Solution

Surgient’s QA/Test Solution accelerates test cycles and application delivery by consolidating pre-production infrastructure and automating the setup and teardown of complex test environments on-demand.

The QA/Test Solution eliminates two pervasive testing barriers: inadequate test infrastructure and the excessive time required to manually provision test configurations. With Surgient, development and test personnel worldwide reliably request and securely access test configurations 24x7 to perform manual and automated testing.

Surgient’s QA/Test Solution integrates with leading test management tools, such as HP Quality Center, and received InfoWorld’s 2007 Technology of the Year Award for Best Virtual Lab Automation Solution.

## About Surgient

Surgient is the market leader in self-service virtualization automation and lab management. The company’s flagship, award-winning product, the Surgient Virtual Automation Platform™, is a powerful, flexible and mature solution that optimizes IT’s ability to support critical business initiatives, effectively manage diverse virtual resources and eliminate physical server and VM sprawl. Using the Surgient Virtual Automation Platform™, world-class companies including IBM, Merck, Raymond James, HP, Halliburton, EMC, CA, Iron Mountain, Target, GE, SAP, Microsoft, Siemens, Intuit and others are accelerating their growth and profitability by automating virtual infrastructure in support of their business initiatives. Surgient is a private, venture-backed company based in Austin, Texas.



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